INDUSTRY TRENDS
TO THE YEAR 2000

by
Tom Droppo
Dairy Cattle Specialist
Manitoba Agriculture

- **Milk Marketing System:** Present supply management system will remain intact. As a result of the new U.S.:Canada Free Trade Agreement certain components of our system may be compromised in future years as a trade-off to attain marketplace benefits in other areas, maybe unrelated to dairy, livestock or even agriculture in general. Overall effect on dairy industry will be negligible. Manitoba quota exchange system will continue to exist, however, prices will gradually rise to $275.00 to $290.00 per litre within next 18 months as quota supply gets tighter relative to demand. Federal subsidy payments to producers will come under close scrutiny and may be reduced or eliminated altogether as the Federal Government continues to wage its war against the national deficit.

- **Dairy Facilities:** The introduction of an orderly quota exchange system in Manitoba has created opportunities for many producers to make longer term plans as far as expansion and cash flow projections. Many facilities are in need of upgrading or replacement. Current interest and activity in modernizing old facilities, and expansion or construction of new facilities is high. Facilities for main herd, replacement stock, milk houses and hay storage are common areas being improved. Expect this trend to continue as long as the industry remains stable.

- **Herd Size, Production, Numbers:** Herd sizes to steadily rise from current Manitoba average of 45 cows to 55 to 60 cows. Herd average production to increase from estimated 1989 provincial average of 12,000 lbs. (5,450 kg) per cow per year to 13,500 lbs. (6,125 kg) by 1995 and to 15,000 lbs. (6,800 kg) by the year 2000. Number of milk shippers in January, 1989 stood at 1,085. Estimate this number to decline to 1,000 by January 1990, to 850 by 1995 and to 750-775 by the year 2000.

- **Within Family Farm Transfers:** Family farm will continue to be the cornerstone of most farm operations. Farm transfers will primarily be of the within family transfer type. However, financial burden to take over family farm will make it increasingly difficult for the next generation. More imaginative and affordable means of within family farm transfer will have to be developed to help defray the ultimate effects of having to service such a heavy debt load.

- **Supplementary Farm Income:** This will become increasingly commonplace as profit margins become harder to maintain or increase or where a major capital purchase (e.g. farm, quota, equipment, land, etc.) requires supplementary off-farm income to help retire the debt load. Watch out for catch 22 situations on some farms where off-farm time commitments jeopardizes on-farm responsibilities. Examine the availability of alternative income sources should the existing off-farm income source be lost. This will be an important consideration before advancing credit.

- **Computerization & Record Keeping:** It'll be imperative for producers to continually upgrade their accounting and record-keeping skills if they're to keep abreast of their operations' management and financial well-being. On-farm computers and computing programs for accounting and record keeping purposes will become increasingly popular. This will be due in part to the large volume of data that will have to be kept (e.g. crops, production, breeding, herd health, finances, etc.) and the type of financial statements required by creditors to attain credit advancement.

- **Advisory Support: Service Groups:** Includes industry, veterinarians, extension, accountants and agricultural lenders. Each will have to maintain a high level of expertise in their specialty field along with broadening their general knowledge of other management areas within a dairy enterprise. More cooperation among support and service groups will result in a TEAMWORK APPROACH to problem solving and extending management advice to producers. Computer skills and aids will play a bigger role in the consultation process.

- **Upgrading Producer Skills:** Reliance on post-secondary education (e.g. college, university) and practical experience up to graduation from post-secondary courses will not be sufficient to meet the ever-changing challenges of the future. Advisory groups and producers will face an on-going responsibility to improve their skills through periodic courses, farm study projects, meetings, tours, etc. The scope of knowledge, management ability, debt retirement capacity and production achievements will become more diverse among producers (e.g. greater division between better and poorer producers).

- **Feeding Management:** Profit generating potential will be the greatest in this management area. Expect to see improved overall feeding management through more widespread adoption of basic nutrition techniques (e.g. feed testing, ration balancing, feeding practices, etc.). Feed cost of production is and will continue to be the biggest expense

item to producing milk. Feeding programs will come under closer scrutiny in order to minimize feed costs. Mechanical aids to feeding cows will become more popular as producers upgrade their facilities and mechanize to accommodate larger herds and improved feeding management. New feeding concepts will arise which will give high producing herds additional opportunities to increase herd productivity and profitability.

- **Genetic Improvement:** Genetics, breeding and reproduction will continue to be the most rapidly advancing management area for years to come. The availability to all producers of genetically superior frozen embryos from embryo banks for implant into recipient cows may soon be commonplace. Genetic manipulation of nucleic material will be an intense area of genetic research resulting in such capabilities as identifying inferior genes for specific traits and replacing them with desirable gene strands for the same traits, cloning and nuclear transfer, and the substitution of existing genetic material with superior genes that will enhance productivity, growth potential and milk composition. Sire proving methodology will be enhanced resulting in the ability to identify superior sires in a shorter period of time at much less cost. Embryo transfer (E.T.) will come more commonplace with producer acceptance and reduced costs. Expect widespread adoption of E.T. among better than average herds. Expect to see the genetics of top 10 to 25% of herd utilized through E.T. Embryos collected from top group of each herd and later transplanted into remaining 75 to 90% of herd at the desired breeding time. E.T. will remain a specialized field. On-farm A.I. by producers will continue to increase in popularity.

- **Milk Recording:** As profit margins get squeezed, expect to see a greater need for the identification and culling of less profitable cows. This will encourage more producers to enroll in a recognized milk recording program or to purchase their own on-farm computerized version of a milk recording program. Advisory groups will have to remain familiar with the type of information provided on milk recording herd reports and its interpretation. Provincial milk recording programs will undergo continuous upgrades to suit producer needs. Electronic collection and transfer of farm data to data processing or sub-processing centres will become commonplace. In 1989, about 500 herds (or 48%) of 1,050 Manitoba herds were enrolled in a recognized milk recording program. By the year 2000, expect the percentage of herds on a recognized program to increase to 70 to 75% and another 5 to 10% on an on-farm version of a recording program. Total number on some form of milk weight collection and analyses program is estimated to reach 600 herds or about 80% of the projected 750 herds still remaining by the year 2000.

- **Awareness of Marketplace Trends:** New dairy products will be researched and developed to meet changing consumer demand or newly identified markets (e.g. Ault Foods - new butter product recently released that is significantly lower in cholesterol than ordinary butter). A more equitable payment system from processors to producers will be introduced to include the solids-not-fat (SNF) or protein content of milk. Quality control will continue to receive increasing emphasis in attempts to improve product quality in the marketplace. On-farm management practices may change somewhat to meet market trends (e.g. feeding and breeding for higher SNF or protein content in milk).

- **Biotechnology & New Products:** Synthetic forms of bovine somatotrophin (B.S.T.), a naturally produced hormone in a cow's body which positively influences milk production and growth rate, will soon be available to producers, but, not before the issue of consumer acceptance has been resolved. Implant or injectable forms of B.S.T. will appear but will be replaced within 10 years with biological advances in the area of genetic manipulation, whereby gene strands responsible for dictating the level of BST naturally produced in the cow's body will be identified and substituted with super genes that'll enhance the cow's B.S.T. producing ability. Numerous types of digestive stimulants and enhancers will surface, but, widespread adoption will be slow. New aids in heat detection will appear, particularly as an aid to producers with large herds kept in confinement.

- **Capital Purchases:** Expect a rising demand for used equipment and increased emphasis on extending its useful life by repairing rather than frequent trade-ins. High capital cost of machinery may lead to the appearance of cost sharing agreements among producer groups or leasing arrangements with dealers. Credit advances for capital outlays will come under closer scrutiny to justify such action and to ensure returns on investment.

- **Environmental Protection:** Water quality and availability, chemical applications (e.g. herbicides, pesticides), soil conservation (e.g. soil erosion control, crop rotation), and air quality will be important issues of concern to both rural and urban sectors.

- **Animal Welfare:** The storm is on the immediate horizon. However, livestock producers in North America will be much better prepared to defend their animal husbandry practices against any animal rightist movements than our European neighbors. They ended up making some radical changes to housing, animal handling and management in response to the

heavy animal welfare movement there. An animal husbandry code of ethics is being drafted and adopted in Canada. The Code is to provide our industry with some general guidelines as to what are acceptable livestock management practices. The Code will mean some modifications to current building designs and management practices, but, not to a degree that will cause financial burden to existing and new producers.